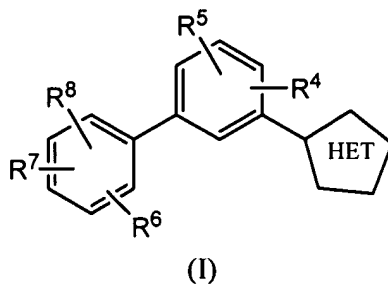


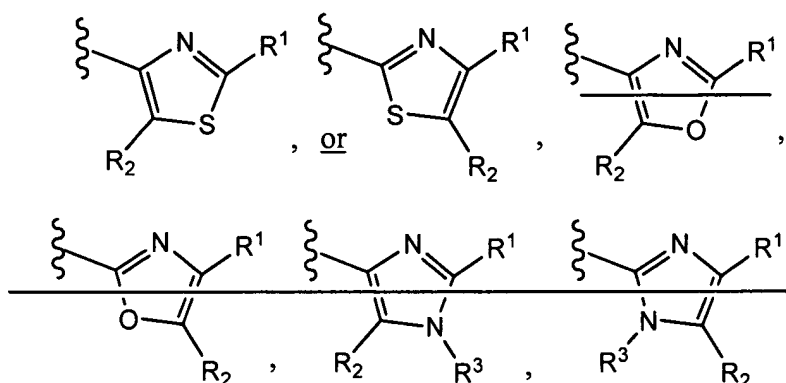
In the Claims

- 1 (Currently Amended) A compound represented by Formula (I):



or a pharmaceutically acceptable salt thereof, wherein

HET is one of the following heterocycles:

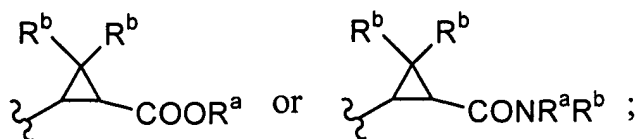


R¹ is

- (a) H;
- (b) C₁-C₆-alkyl, C₂-C₄-alkenyl, C₂-C₄-alkynyl, C₃-C₆-cycloalkyl, or C₁-C₄-alkyl-[C₃-C₆-cycloalkyl], any of which is optionally substituted with one or more of the following substituents: F, CF₃, OH, O-(C₁-C₄)alkyl, S(O)_{0.2}-(C₁-C₄)alkyl, O-CONR^aR^b, NR^aR^b, N(R^a)CONR^aR^b, COO-(C₁-C₄)alkyl, COOH, CN, CONR^aR^b, SO₂NR^aR^b, N(R^a)SO₂NR^aR^b, -C(=NH)NH₂, tetrazolyl, triazolyl, imidazolyl, oxazolyl, oxadiazolyl, isooxazolyl, thiazolyl, furyl, thienyl, pyrazolyl, pyrrolyl, pyridyl, pyrimidinyl, pyrazinyl, phenyl, piperidinyl, morpholinyl, pyrrolidinyl or piperazinyl;
- (c) -O-C₁-C₆-alkyl, -O-C₃-C₆-cycloalkyl, -S-C₁-C₆-alkyl or -S-C₃-C₆-cycloalkyl, any of which is optionally substituted with one or more of the following substituents: F, CF₃, OH, O-(C₁-

- C₄alkyl, S(O)₀₋₂-(C₁-C₄)alkyl, O-CONR^aR^b, NR^aR^b, N(R^a)CONR^aR^b, COO-(C₁-C₄)alkyl, COOH, CN, CONR^aR^b, SO₂NR^aR^b, N(R^a)SO₂NR^aR^b, -C(=NH)NH₂, tetrazolyl, triazolyl, imidazolyl, oxazolyl, oxadiazolyl, isooxazolyl, thiazolyl, furyl, thienyl, pyrazolyl, pyrrolyl, pyridyl, pyrimidinyl, pyrazinyl, phenyl, piperidinyl, morpholinyl, pyrrolidinyl or piperazinyl;
- (d) -C₀-C₄-alkyl-C₁-C₄-perfluoroalkyl, or -O-C₀-C₄-alkyl-C₁-C₄-perfluoroalkyl;
- (e) -OH;
- (f) -O-aryl, or -O-C₁-C₄-alkyl-aryl, wherein aryl is phenyl, pyridyl, pyrimidinyl, furyl, thienyl, pyrrolyl, triazolyl, pyrazolyl, thiazolyl, isoxazolyl, oxazolyl, or oxadiazolyl, any aryl of which is optionally substituted with 1-3 substituents selected from i) F, Cl, Br, I, ii) -CN, iii) -NO₂, iv) -C(=O)(R^a), v) -OR^a, vi) -NR^aR^b, vii) -C₀₋₄alkyl-CO-OR^a, viii) -(C₀₋₄alkyl)-NH-CO-OR^a, ix) -(C₀₋₄alkyl)-CO-N(R^a)(R^b), x) -S(O)₀₋₂R^a, xi) -SO₂N(R^a)(R^b), xii) -NR^aSO₂R^a, xiii) -C₁₋₁₀alkyl, and xiv) -C₁₋₁₀alkyl, wherein one or more of the alkyl carbons can be replaced by a -NR^a-, -O-, -S(O)₁₋₂-, -O-C(O)-, -C(O)-O-, -C(O)-N(R^a)-, -N(R^a)-C(O)-, -N(R^a)-C(O)-N(R^a)-, -C(O)-, -CH(OH)-, -CH=CH-, or -C≡C-;
- (g) -OCON(R^a)(R^b), or -OSO₂N(R^a)(R^b);
- (h) -SH, or -SCON(R^a)(R^b);
- (i) NO₂;
- (j) NR^aR^b, -N(COR^a)R^b, -N(SO₂R^a)R^b, -N(R^a)SO₂N(R^a)₂, -N(OR^a)CONR^aR^b, -N(R^a)SO₂R^a or -N(R^a)CON(R^a)₂;
- (k) -CH(OR^a)R^a, -C(OR^b)CF₃, -CH(NHR^b)R^a, -C(=O)R^a, C(=O)CF₃, -SOCH₃, -SO₂CH₃, COOR^a, CN, CONR^aR^b, -COCONR^aR^b, -SO₂NR^aR^b, -CH₂O-SO₂NR^aR^b, SO₂N(R^a)OR^a, -C(=NH)NH₂, -CR^a=N-OR^a, CH=CHCONR^aR^b;
- (l) -CONR^a(CH₂)₀₋₂C(R^a)(R^b)(CH₂)₀₋₂CONR^aR^b;
- (m) tetrazolyl, tetrazolinonyl, triazolyl, triazolinonyl, imidazolyl, imidozolonyl, oxazolyl, oxadiazolyl, isooxazolyl, thiazolyl, furyl, thienyl, pyrazolyl, pyrazolonyl, pyrrolyl, pyridyl, pyrimidinyl, pyrazinyl, or phenyl, any of which is optionally substituted with 1-3 substituents selected from i) F, Cl, Br, I, ii) -CN, iii) -NO₂, iv) -C(=O)R^a, v) C₁-C₆-alkyl, vi) -O-R^a, vii) -NR^aR^b, viii) -C₀-C₄-alkyl -CO-O R^a, ix) -(C₀-C₄-alkyl)-NH-CO-OR^a, x) -(C₀-C₄-alkyl)-CO-NR^aR^b, xi) -S(O)₀₋₂R^a, xii) -SO₂NR^aR^b, xiii) -NHSO₂R^a, xiv) -C₁-C₄-perfluoroalkyl, and xv) -O-C₁-C₄-perfluoroalkyl;
- (n) -C(R^a)=C(R^b)-COOR^a, or -C(R^a)=C(R^b)-CONR^aR^b;

(o)



or

- (p) piperidin-1-yl, morpholin-4-yl, pyrrolidin-1-yl, piperazin-1-yl or 4-substituted piperazin-1-yl, any of which is optionally substituted with 1-3 substituents selected from i) -CN, ii) -C(=O)(R^a), iii) C₁-C₆-alkyl, iv) -OR^a, v) -NR^aR^b, vi) -C₀-C₄-alkyl-CO-OR^a, vii) -(C₀-C₄-alkyl)-NH-CO-OR^a, viii) -(C₀-C₄-alkyl)-CON(R^a)(R^b), ix) -SR^a, x) -S(O)₀₋₂R^a, xi) -SO₂N(R^a)(R^b), xii) -NR^aSO₂R^a, xiii) -C₁-C₄-perfluoroalkyl and xiv) -O-C₁-C₄-perfluoroalkyl;

R^a is

- (a) H;
- (b) C₁-C₄-alkyl, optionally substituted with one or more of the following substituents: F, CF₃, OH, O-(C₁-C₄)alkyl, S(O)₀₋₂-(C₁-C₄)alkyl, -OCONH₂, -OCONH(C₁-C₄alkyl), -OCON(C₁-C₄alkyl)(C₁-C₄alkyl), -OCONHC₁-C₄alkyl-aryl, -OCON(C₁-C₄alkyl)(C₁-C₄alkyl-aryl), NH₂, NH(C₁-C₄alkyl), N(C₁-C₄alkyl)(C₁-C₄alkyl), NH(C₁-C₄alkyl-aryl), N(C₁-C₄alkyl)(C₁-C₄alkyl-aryl), NHCONH₂, NHCONH(C₁-C₄alkyl), NHCONH(C₁-C₄alkyl-aryl), -NHCON(C₁-C₄alkyl)(C₁-C₄alkyl), NHCON(C₁-C₄alkyl)(C₁-C₄alkyl-aryl), N(C₁-C₄alkyl)CON(C₁-C₄alkyl)(C₁-C₄alkyl), N(C₁-C₄alkyl)CON(C₁-C₄alkyl)(C₁-C₄alkyl-aryl), COO-(C₁-C₄-alkyl), COOH, CN, CONH₂, CONH(C₁-C₄alkyl), CON(C₁-C₄alkyl)(C₁-C₄alkyl), SO₂NH₂, SO₂NH(C₁-C₄alkyl), SO₂NH(C₁-C₄alkyl-aryl), SO₂N(C₁-C₄alkyl)(C₁-C₄alkyl), NHSO₂NH₂, -C(=NH)NH₂, tetrazolyl, triazolyl, imidazolyl, oxazolyl, oxadiazolyl, isooxazolyl, thiazolyl, furyl, thienyl, pyrazolyl, pyrrolyl, pyridyl, pyrimidinyl, pyrazinyl, phenyl, piperidinyl, morpholinyl, pyrrolidinyl or piperazinyl;
- (c) C₀-C₄-alkyl-(C₁-C₄)-perfluoroalkyl; or
- (d) C₁-C₄-alkyl-aryl, wherein aryl is phenyl, pyridyl, pyrimidinyl, furyl, thienyl, pyrrolyl, triazolyl, pyrazolyl, thiazolyl, isoxazolyl, oxazolyl, or oxadiazolyl, any aryl of which is optionally substituted with 1-3 substituents selected from i) F, Cl, Br, I, ii) -CN, iii) -NO₂, iv) -C(=O)(C₁-C₄-alkyl), v) -O(C₁-C₄-alkyl), vi) -N(C₁-C₄-alkyl)(C₁-C₄-alkyl), vii) -C₁-C₁₀alkyl, and viii) -C₁-C₁₀alkyl, wherein one or more of the alkyl carbons can be replaced by a -O-, -S(O)₁₋₂-, -O-C(O)-, -C(O)-O-, -C(O)-, -CH(OH)-, -CH=CH-, or -C≡C-;

R^b is

- (a) H; or
- (b) C₁-C₆-alkyl, optionally substituted with one or more of the following substituents: F, CF₃, OH, O-(C₁-C₄)alkyl, S(O)₀₋₂-(C₁-C₄)alkyl, -OCONH₂, -OCONH(C₁-C₄alkyl), NH₂, NH(C₁-C₄alkyl), N(C₁-C₄alkyl)(C₁-C₄alkyl), NHCONH₂, NHCONH(C₁-C₄alkyl), -NHCON(C₁-C₄alkyl)(C₁-C₄alkyl), COO-(C₁-C₄alkyl), COOH, CN, and CONH₂;

R² is:

- (a) H;
- (b) -C₁-C₄-alkyl, -C₃-C₆-cycloalkyl or -C₁-C₄-alkyl-(C₃-C₆-cycloalkyl), optionally substituted with one or more of the following substituents: F, CF₃, OH, O-(C₁-C₄)alkyl, S(O)₀₋₂-(C₁-C₄)alkyl, O-CONR^aR^b, NR^aR^b, N(R^a)CONR^aR^b, COO-(C₁-C₄)alkyl, COOH, CN, CONR^aR^b, SO₂NR^aR^b, N(R^a)SO₂NR^aR^b, -C(=NH)NH₂, tetrazolyl, triazolyl, imidazolyl, oxazolyl, oxadiazolyl, isooxazolyl, thiazolyl, furyl, thienyl, pyrazolyl, pyrrolyl, pyridyl, pyrimidinyl, pyrazinyl, phenyl, piperidinyl, morpholinyl, pyrrolidinyl and piperazinyl;
- (c) -C₀-C₄-alkyl-C₁-C₄-perfluoroalkyl;
- (d) aryl or -(C₁-C₄-alkyl)-aryl, wherein aryl is phenyl, pyridyl, pyrimidinyl, furyl, thienyl, pyrrolyl, triazolyl, pyrazolyl, thiazolyl, isoxazolyl, oxazolyl, or oxadiazolyl, any aryl of which is optionally substituted with 1-3 substituents selected from i) F, Cl, Br, I, ii) -CN, iii) -NO₂, iv) -C(=O)(R^a), v) -OR^a, vi) -NR^aR^b, vii) -C₀₋₄alkyl-CO-OR^a, viii) -(C₀₋₄alkyl)-NH-CO-OR^a, ix) -(C₀₋₄alkyl)-CO-N(R^a)(R^b), x) -S(O)₀₋₂R^a, xi) -SO₂N(R^a)(R^b), xii) -NR^aSO₂R^a, xiii) -C₁₋₁₀alkyl, and xiv) -C₁₋₁₀alkyl, wherein one or more of the alkyl carbons can be replaced by a -NR^a-, -O-, -S(O)₁₋₂-, -O-C(O)-, -C(O)-O-, -C(O)-N(R^a)-, -N(R^a)-C(O)-, -N(R^a)-C(O)-N(R^a)-, -C(O)-, -CH(OH)-, -CH=CH-, or -C≡C-; or
- (e) -C(=O)(R^a), -CONR^aR^b, COO-(C₁-C₄)alkyl, -SO₂R^a, -SO₂N(R^a)(R^b);

R³ is

- (a) H;
- (b) -C₁-C₄-alkyl, -C₃-C₆-cycloalkyl or -C₁-C₄-alkyl-(C₃-C₆-cycloalkyl), optionally substituted with one or more of the following substituents: F, CF₃, OH, O-(C₁-C₄)alkyl, S(O)₀₋₂-(C₁-C₄)alkyl, O-CONR^aR^b, NR^aR^b, N(R^aR^b)CONR^aR^b, COO-(C₁-C₄)alkyl, COOH, CN, CONR^aR^b, SO₂NR^aR^b, N(R^aR^b)SO₂NR^aR^b, -C(=NH)NH₂, tetrazolyl, triazolyl, imidazolyl, oxazolyl, oxadiazolyl, isooxazolyl, thiazolyl, furyl, thienyl, pyrazolyl, pyrrolyl, pyridyl, pyrimidinyl, pyrazinyl, phenyl, piperidinyl, morpholinyl, pyrrolidinyl or piperazinyl;
- (c) -C₀-C₄-alkyl-C₁-C₄-perfluoroalkyl;

- (d) aryl or $-(C_1-C_4\text{-alkyl})\text{-aryl}$, wherein aryl is phenyl, pyridyl, pyrimidinyl, furyl, thienyl, pyrrolyl, triazolyl, pyrazolyl, thiazolyl, isoxazolyl, oxazolyl, or oxadiazolyl, any aryl of which is optionally substituted with 1-3 substituents selected from i) F, Cl, Br, I, ii) $-\text{CN}$, iii) $-\text{NO}_2$, iv) $-\text{C}(=\text{O})(\text{R}^a)$, v) $-\text{OR}^a$, vi) $-\text{NR}^a\text{R}^b$, vii) $-\text{C}_{0-4}\text{alkyl}-\text{CO}-\text{OR}^a$, viii) $-(\text{C}_{0-4}\text{alkyl})\text{-NH}-\text{CO}-\text{OR}^a$, ix) $-(\text{C}_{0-4}\text{alkyl})\text{-CO}-\text{N}(\text{R}^a)(\text{R}^b)$, x) $-\text{S}(\text{O})_{0-2}\text{R}^a$, xi) $-\text{SO}_2\text{N}(\text{R}^a)(\text{R}^b)$, xii) $-\text{NR}^a\text{SO}_2\text{R}^a$, xiii) $-\text{C}_{1-10}\text{alkyl}$, and xiv) $-\text{C}_{1-10}\text{alkyl}$, wherein one or more of the alkyl carbons can be replaced by a $-\text{NR}^a$ -, $-\text{O}-$, $-\text{S}(\text{O})_{1-2}-$, $-\text{O}-\text{C}(\text{O})-$, $-\text{C}(\text{O})-\text{O}-$, $-\text{C}(\text{O})-\text{N}(\text{R}^a)-$, $-\text{N}(\text{R}^a)-\text{C}(\text{O})-$, $-\text{N}(\text{R}^a)-\text{C}(\text{O})-\text{N}(\text{R}^a)-$, $-\text{C}(\text{O})-$, $-\text{CH}(\text{OH})-$, $-\text{CH}=\text{CH}-$, or $-\text{C}\equiv\text{C}-$;
- (e) $-\text{O}-\text{C}_1-\text{C}_4\text{-alkyl}$, $-\text{O}-\text{C}_0-\text{C}_4\text{-alkyl}-\text{C}_1-\text{C}_4\text{-perfluoroalkyl}$, $-\text{O}-\text{aryl}$ or $-\text{O}(\text{C}_1-\text{C}_4\text{-alkyl})\text{-aryl}$; or
- (f) $-\text{C}(=\text{O})(\text{R}^a)$, $-\text{SO}_2\text{R}^a$, $-\text{SO}_2\text{N}(\text{R}^a)(\text{R}^b)$, CN , NR^aR^b , NO_2 , F, Cl, Br, I, OH, OCONR^aR^b , $\text{O}(\text{C}_1-\text{C}_4\text{-alkyl})\text{CONR}^a\text{R}^b$, $-\text{OSO}_2\text{NR}^a\text{R}^b$, COOR^a , or CONR^aR^b ;

R^4 and R^5 each independently is:

- (a) H;
- (b) ~~$-\text{C}_1-\text{C}_6\text{-alkyl}$, $-\text{C}_2-\text{C}_6\text{-alkenyl}$, $-\text{C}_2-\text{C}_6\text{-alkynyl}$ or $-\text{C}_3-\text{C}_6\text{-cycloalkyl}$, any of which is optionally substituted with one or more of the following substituents: F, CF_3 , $-\text{O}(\text{C}_1-\text{C}_4\text{-alkyl})$, CN , $-\text{N}(\text{R}^a)(\text{R}^b)$, $-\text{N}(\text{R}^a)\text{CO}(\text{C}_1-\text{C}_4\text{-alkyl})$, COOR^b , $\text{CON}(\text{R}^a)(\text{R}^b)$ or phenyl;~~
- (c) ~~$-\text{O}-\text{C}_0-\text{C}_6\text{-alkyl}$, $-\text{O}-\text{aryl}$, or $-\text{O}-\text{C}_1-\text{C}_4\text{-alkyl-aryl}$, wherein aryl is phenyl, pyridyl, pyrimidinyl, furyl, thienyl, pyrrolyl, triazolyl, pyrazolyl, thiazolyl, isoxazolyl, oxazolyl, or oxadiazolyl, any aryl of which is optionally substituted with 1-3 substituents selected from i) F, Cl, Br, I, ii) $-\text{CN}$, iii) $-\text{NO}_2$, iv) $-\text{C}(=\text{O})(\text{R}^a)$, v) $-\text{OR}^a$, vi) $-\text{NR}^a\text{R}^b$, vii) $-\text{C}_{0-4}\text{alkyl}-\text{CO}-\text{OR}^a$, viii) $-(\text{C}_{0-4}\text{alkyl})\text{-NH}-\text{CO}-\text{OR}^a$, ix) $-(\text{C}_{0-4}\text{alkyl})\text{-CO}-\text{N}(\text{R}^a)(\text{R}^b)$, x) $-\text{S}(\text{O})_{0-2}\text{R}^a$, xi) $-\text{SO}_2\text{N}(\text{R}^a)(\text{R}^b)$, xii) $-\text{NR}^a\text{SO}_2\text{R}^a$, xiii) $-\text{C}_{1-10}\text{alkyl}$, and xiv) $-\text{C}_{1-10}\text{alkyl}$, wherein one or more of the alkyl carbons can be replaced by a $-\text{NR}^a$ -, $-\text{O}-$, $-\text{S}(\text{O})_{1-2}-$, $-\text{O}-\text{C}(\text{O})-$, $-\text{C}(\text{O})-\text{O}-$, $-\text{C}(\text{O})-\text{N}(\text{R}^a)-$, $-\text{N}(\text{R}^a)-\text{C}(\text{O})-$, $-\text{N}(\text{R}^a)-\text{C}(\text{O})-\text{N}(\text{R}^a)-$, $-\text{C}(\text{O})-$, $-\text{CH}(\text{OH})-$, $-\text{C}=\text{C}-$, or $-\text{C}\equiv\text{C}-$;~~
- (d) ~~$-\text{C}_0-\text{C}_4\text{-alkyl}-\text{C}_1-\text{C}_4\text{-perfluoroalkyl}$, or $-\text{O}-\text{C}_0-\text{C}_4\text{-alkyl}-\text{C}_1-\text{C}_4\text{-perfluoroalkyl}$; or~~
- (e) ~~CN , NH_2 , NO_2 , F, Cl, Br, I, OH, $\text{OCON}(\text{R}^a)(\text{R}^b)$, $\text{O}(\text{C}_1-\text{C}_4\text{-alkyl})\text{CONR}^a\text{R}^b$, $-\text{OSO}_2\text{N}(\text{R}^a)(\text{R}^b)$, COOR^b , $\text{CON}(\text{R}^a)(\text{R}^b)$, or aryl, wherein aryl is phenyl, pyridyl, pyrimidinyl, furyl, thienyl, pyrrolyl, triazolyl, pyrazolyl, thiazolyl, isoxazolyl, oxazolyl, or oxadiazolyl, any aryl of which is optionally substituted with 1-3 substituents selected from i) F, Cl, Br, I, ii) $-\text{CN}$, iii) $-\text{NO}_2$, iv) $-\text{C}(=\text{O})(\text{R}^a)$, v) $-\text{OR}^a$, vi) $-\text{NR}^a\text{R}^b$, vii) $-\text{C}_{0-4}\text{alkyl}-\text{CO}-\text{OR}^a$, viii) $-(\text{C}_{0-4}\text{alkyl})\text{-NH}-\text{CO}-\text{OR}^a$, ix) $-(\text{C}_{0-4}\text{alkyl})\text{-CO}-\text{N}(\text{R}^a)(\text{R}^b)$, x) $-\text{S}(\text{O})_{0-2}\text{R}^a$, xi) $-\text{SO}_2\text{N}(\text{R}^a)(\text{R}^b)$, xii) $-\text{NR}^a\text{SO}_2\text{R}^a$, xiii) $-\text{C}_{1-10}\text{alkyl}$, and xiv) $-\text{C}_{1-10}\text{alkyl}$, wherein one or more of the alkyl carbons can be replaced by a $-\text{NR}^a$ -, $-\text{O}-$, $-\text{S}(\text{O})_{1-2}-$, $-\text{O}-\text{C}(\text{O})-$, $-\text{C}(\text{O})-\text{O}-$, $-\text{C}(\text{O})-\text{N}(\text{R}^a)-$, $-\text{N}(\text{R}^a)-\text{C}(\text{O})-$, $-\text{N}(\text{R}^a)-\text{C}(\text{O})-\text{N}(\text{R}^a)-$, $-\text{C}(\text{O})-$, $-\text{CH}(\text{OH})-$, $-\text{C}=\text{C}-$, or $-\text{C}\equiv\text{C}-$; and~~

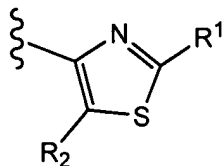
R⁶, R⁷ and R⁸ each independently is:

- (a) H, provided at least one of R⁶, R⁷ and R⁸ is not hydrogen;
- (b) C₁-C₆-alkyl, C₂-C₄-alkenyl, C₃-C₄-alkynyl or C₃-C₆-cycloalkyl, any of which is optionally substituted all substituted with one or more of the following substituents: F, CF₃, OH, O-(C₁-C₄)alkyl, OCON(R^a)(R^b), NR^aR^b, COOR^a, CN, CONR^aR^b, N(R^a)CONR^aR^b, N(R^a)SO₂NR^aR^b, SO₂NR^aR^b, S(O)_{0.2}(C₁-C₄-alkyl), -C(=NH)NH₂, tetrazolyl, triazolyl, imidazolyl, oxazolyl, oxadiazolyl, isooxazolyl, thiazolyl, furyl, thienyl, pyrazolyl, pyrrolyl, pyridyl, pyrimidinyl, pyrazinyl, phenyl, piperidinyl, morpholinyl, pyrrolidinyl, or piperazinyl;
- (c) -O-C₁-C₆-alkyl, -O-C₃-C₆-cycloalkyl, -S-C₁-C₆-alkyl, or -S-C₃-C₆-cycloalkyl, any of which is optionally substituted with one or more of the following substituents: F, CF₃, OH, O-(C₁-C₄)alkyl, NH₂, NH(C₁-C₄-alkyl), N(C₁-C₄-alkyl)₂, COOH, CN, CONH₂, CONH(C₁-C₄-alkyl), CONH(C₁-C₄-alkyl)₂, SO₂NH₂, SO₂NH(C₁-C₄-alkyl), tetrazolyl, triazolyl, imidazolyl, oxazolyl, oxadiazolyl, isooxazolyl, thiazolyl, furyl, thienyl, pyrazolyl, pyrrolyl, pyridyl, pyrimidinyl, pyrazinyl, phenyl, piperidinyl, morpholinyl, pyrrolidinyl, or piperazinyl;
- (d) -C₀-C₄-alkyl-C₁-C₄-perfluoroalkyl, or -O-C₀-C₄-alkyl-C₁-C₄-perfluoroalkyl; or
- (e) -O-aryl, or -O-C₁-C₄-alkyl-aryl, wherein aryl is phenyl, pyridyl, pyrimidinyl, furyl, thienyl, pyrrolyl, triazolyl, pyrazolyl, thiazolyl, isoxazolyl, oxazolyl, or oxadiazolyl, any aryl of which is optionally substituted with 1-3 substituents selected from i) F, Cl, Br, I, ii) -CN, iii) -NO₂, iv) -C(=O)(R^a), v) -OR^a, vi) -NR^aR^b, vii) -C_{0.4}alkyl-CO-OR^a, viii) -(C_{0.4}alkyl)-NH-CO-OR^a, ix) -(C_{0.4}alkyl)-CO-N(R^a)(R^b), x) -S(O)_{0.2}R^a, xi) -SO₂N(R^a)(R^b), xii) -NR^aSO₂R^a, xiii) -C₁₋₁₀alkyl, and xiv) -C₁₋₁₀alkyl, wherein one or more of the alkyl carbons can be replaced by a -NR^a-, -O-, -S(O)_{1.2}-, -O-C(O)-, -C(O)-O-, -C(O)-N(R^a)-, -N(R^a)-C(O)-, -N(R^a)-C(O)-N(R^a)-, -C(O)-, -CH(OH)-, -CH=CH-, or -C≡C-; (f) CN, N(R^a)(R^b), NO₂, F, Cl, Br, I, -OR^a, -SR^a, -OCON(R^a)(R^b), -OSO₂N(R^a)(R^b), COOR^b, CON(R^a)(R^b), -N(R^a)CON(R^a)(R^b), -N(R^a)SO₂N(R^a)(R^b), -C(OR^b)R^a, -C(OR^a)CF₃, -C(NHR^a)CF₃, -C(=O)R^a, C(=O)CF₃, -SOCH₃, -SO₂CH₃, -NHSO₂(C₁₋₆-alkyl), -NHSO₂-aryl, SO₂N(R^a)(R^b), -CH₂OSO₂N(R^a)(R^b), SO₂N(R^b)-OR^a, -C(=NH)NH₂, -CR_a=N-OR_a, CH=CH or aryl, wherein aryl is phenyl, pyridyl, pyrimidinyl, furyl, thienyl, pyrrolyl, triazolyl, pyrazolyl, thiazolyl, isoxazolyl, oxazolyl, or oxadiazolyl, any aryl of which is optionally substituted with 1-3 substituents selected from i) F, Cl, Br, I, ii) -CN, iii) -NO₂, iv) -C(=O)(R^a), v) -OR^a, vi) -NR^aR^b, vii) -C_{0.4}alkyl-CO-OR^a, viii) -(C_{0.4}alkyl)-NH-CO-OR^a, ix) -(C_{0.4}alkyl)-CO-N(R^a)(R^b), x) -S(O)_{0.2}R^a, xi) -SO₂N(R^a)(R^b), xii) -NR^aSO₂R^a, xiii) -C₁₋₁₀alkyl, and xiv) -C₁₋₁₀alkyl, wherein one or more of the alkyl carbons can be replaced by a -NR^a-, -O-, -S(O)_{1.2}-, -O-C(O)-, -C(O)-O-, -C(O)-N(R^a)-, -N(R^a)-C(O)-, -N(R^a)-C(O)-N(R^a)-, -C(O)-, -CH(OH)-, -CH=CH-, or -C≡C-; or when R⁶ and R⁷ are present on adjacent carbon atoms, R⁶ and R⁷, together with the benzene ring to which

they are attached, may form a bicyclic aromatic ring selected from naphthyl, indolyl, quinoliny, isoquinoliny, quinoxaliny, benzofuryl, benzothienyl, benzoxazolyl, benzothiazolyl, and benzimidazolyl, any aromatic ring of which is optionally substituted with 1-4 independent substituents selected from i) halogen, ii) -CN, iii) -NO₂, iv) -CHO, v) -O-C₁₋₄alkyl, vi) -N(C₀₋₄alkyl)(C₀₋₄alkyl), vii) -C₀₋₄alkyl-CO-O(C₀₋₄alkyl), viii) -(C₀₋₄alkyl)-NH-CO-O(C₀₋₄alkyl), ix) -(C₀₋₄alkyl)-CO-N(C₀₋₄alkyl)(C₀₋₄alkyl), x) -S(C₀₋₄alkyl), xi) -S(O)(C₁₋₄alkyl), xii) -SO₂(C₀₋₄alkyl), xiii) -SO₂N(C₀₋₄alkyl)(C₀₋₄alkyl), xiv) -NHSO₂(C₀₋₄alkyl)(C₀₋₄alkyl), xv) -C₁₋₁₀alkyl and xvi) -C₁₋₁₀alkyl in which one or more of the carbons can be replaced by a -N(C₀₋₆alkyl)-, -O-, -S(O)₁₋₂-, -O-C(O)-, -C(O)-O-, -C(O)-N(C₀₋₆alkyl)-, -N(C₀₋₆alkyl)-C(O)-, -N(C₀₋₆alkyl)-C(O)-N(C₀₋₆alkyl)-, -C(O)-, -CH(OH), -CH=CH-, or -C≡C-.

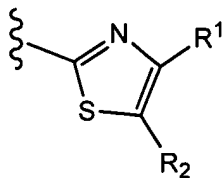
2(Original). A compound according to Claim 1, or a pharmaceutically acceptable salt thereof, wherein

HET is



3(Original). A compound according to Claim 1, or a pharmaceutically acceptable salt thereof, wherein

HET is



4. Canceled.

5. Canceled.

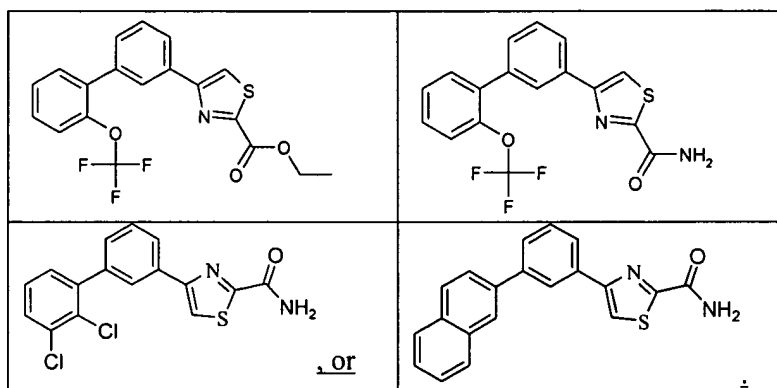
6. Canceled.

7. Canceled.

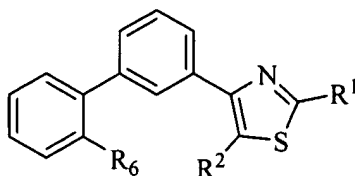
8(Original). A compound according to Claim 1, or a pharmaceutically acceptable salt thereof, wherein

R^6 is other than H and is attached at the ortho position.

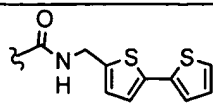
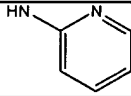
9(Currently Amended). A compound represented by



10(Currently Amended) A compound according to ~~Claim 1~~ which is represented by



R ⁶	R ²	R ¹
Cl	H	H
Cl	H	COOEt
Cl	H	CONH ₂
Cl	H	CONH-tBu

R ⁶	R ²	R ¹
Cl	H	
Cl	H	NH ₂
CF ₃	H	COOEt
CF ₃	H	CONH ₂
CF ₃	H	H
CF ₃	H	NH ₂
OCF ₃	H	CH ₃
OCF ₃	H	H
OCF ₃	H	NH ₂
OCF ₃	H	CONMe ₂
OCF ₃	Cl	CH ₃
OCF ₃	H	NHSO ₂ CH ₃
OCF ₃	H	CH ₂ OH
O-Ph	H	CONH ₂
CF ₃	H	NHCONH-iPr
OCF ₃	H	NHCONH-iPr
OCF ₃	H	NHCOCH ₃
CF ₃	H	NHCOCH ₃
OCF ₃	H	CH ₂ COOEt
OCF ₃	H	CH ₂ CN
OCF ₃	H	CH ₂ CONH ₂
CF ₃	H	CH ₂ CONH ₂
OCF ₃	H	NHCONMe ₂
OCF ₃	H	
OCF ₃	H	2-Pyrimidyl
OCF ₃	H	2-Pyridyl
OCF ₃	H	2-Oxazolyl
OCF ₃	H	2-Imidazolyl
OCF ₃	H	2-Pyrazolyl
OCF ₃	H	2-(1-Methyl)-imidazolyl

R ₆	R ₂	R ₁
OCF ₃	H	COOH
OCF ₃	H	CH ₂ OH
OCF ₃	H	CONH(CH ₂) ₃ OH, <u>or</u>
O-Ph	H	CONH ₂

13. Canceled.

14. Canceled.

15. Canceled.

16. Canceled.

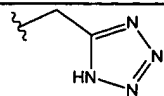
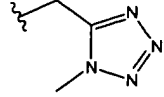
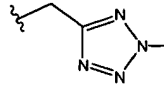
17(Original). A pharmaceutical composition comprising a therapeutically effective amount of the compound according to Claim 1, or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable carrier.

18. Canceled.

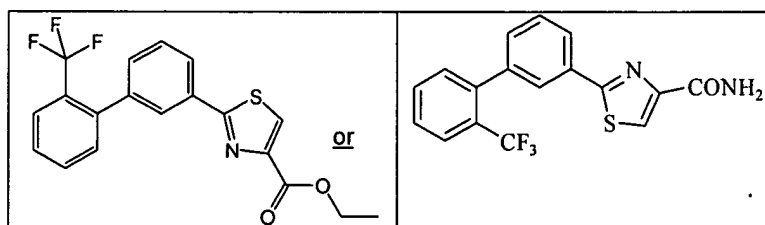
19(Original). A method of treatment or prevention of pain comprising the step of administering to a patient in need thereof a therapeutically effective amount, or a prophylactically effective amount, of the compound according to Claim 1, or a pharmaceutically acceptable salt thereof.

20(Original). A method of treatment of chronic, visceral, inflammatory and neuropathic pain syndromes comprising the step of administering to a patient in need thereof a therapeutically effective amount, or a prophylactically effective amount, of the compound according to Claim 1, or a pharmaceutically acceptable salt thereof.

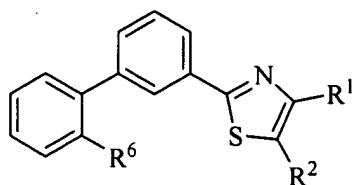
21(Original). A method of treatment of pain resulting from, or associated with, traumatic nerve injury, nerve compression or entrapment, postherpetic neuralgia, trigeminal neuralgia, diabetic neuropathy, cancer and chemotherapy, comprising the step of administering to

R^6	R^2	R^1
OCF_3	H	
OCF_3	H	 , or
OCF_3	H	

11(Currently Amended). A compound represented by



12(Currently Amended). A compound according to Claim 1 represented by



R_6	R_2	R_1
CF_3	H	H
CF_3	H	COOEt
CF_3	H	CONH ₂
CF_3	H	CONHCH ₃
CF_3	COOEt	CH ₃
CF_3	CONH ₂	CH ₃
OCF_3	H	H
OCF_3	H	COOCH ₃
OCF_3	H	CONH ₂

a patient in need thereof a therapeutically effective amount, or a prophylactically effective amount, of the compound according to Claim 1, or a pharmaceutically acceptable salt thereof.

22(Original). A method of treatment of chronic lower back pain comprising the step of administering to a patient in need thereof a therapeutically effective amount, or a prophylactically effective amount, of the compound according to Claim 1, or a pharmaceutically acceptable salt thereof.

23(Original). A method of treatment of phantom limb pain comprising the step of administering to a patient in need thereof a therapeutically effective amount, or a prophylactically effective amount, of the compound according to Claim 1, or a pharmaceutically acceptable salt thereof.

24(Original). A method of treatment of HIV- and HIV treatment-induced neuropathy, chronic pelvic pain, neuroma pain, complex regional pain syndrome, chronic arthritic pain and related neuralgias comprising the step of administering to a patient in need thereof a therapeutically effective amount, or a prophylactically effective amount, of the compound according to Claim 1, or a pharmaceutically acceptable salt thereof.

25(Original). A method of administering local anesthesia comprising the step of administering to a patient in need thereof a therapeutically effective amount, or a prophylactically effective amount, of the compound according to Claim 1, or a pharmaceutically acceptable salt thereof.

26(Original). A method of treatment of irritable bowel syndrome and Crohn's disease comprising the step of administering to a patient in need thereof a therapeutically effective amount, or a prophylactically effective amount, of the compound according to Claim 1, or a pharmaceutically acceptable salt thereof.

27(Original). A method of treatment of epilepsy and partial and generalized tonic seizures comprising the step of administering to a patient in need thereof a therapeutically effective amount, or a prophylactically effective amount, of the compound according to Claim 1, or a pharmaceutically acceptable salt thereof.

28(Original). A method for neuroprotection under ischaemic conditions caused by stroke or neural trauma comprising the step of administering to a patient in need thereof a

therapeutically effective amount, or a prophylactically effective amount, of the compound according to Claim 1, or a pharmaceutically acceptable salt thereof.

29(Original). A method of treatment of multiple sclerosis comprising the step of administering to a patient in need thereof a therapeutically effective amount, or a prophylactically effective amount, of the compound according to Claim 1, or a pharmaceutically acceptable salt thereof.

30(Original). A method of treatment of bipolar disorder comprising the step of administering to a patient in need thereof a therapeutically effective amount, or a prophylactically effective amount, of the compound according to Claim 1, or a pharmaceutically acceptable salt thereof.

31(Original). A method of treatment of tachy-arrhythmias comprising the step of administering to a patient in need thereof a therapeutically effective amount, or a prophylactically effective amount, of the compound according to Claim 1, or a pharmaceutically acceptable salt thereof.

REMARKS

The Official Action of September 4, 2008 and references cited therein have been carefully considered. The amendments and remarks herein are considered to be responsive thereto. The claims remaining in the case are 1-3, 8-12, 17, and 19-31. Pursuant to the Restriction Requirement Claims 4-7, 13-16 and 18 have been canceled without prejudice to refile. Claims 1 and 9-12 are amended to more precisely define the invention.

The Oath and Declaration is objected to for failing to identify PCT/US04/112721 in accordance with 37 CFR 1.497(a)(2). However, 37 CFR 1.497(a)(2) requires the declaration to identify the specification to which it is attached. There is no requirement that the identifier be the same number given by the Office. Upon inspection of the upper right-hand corner of the Declarations sent by Applicants on October 18, 2005 and on February 26, 2007 one can see the Attorney Docket No. of 21375YP listed. In the top left-hand corner of the specification the same Attorney Docket No. is provided. Thus, the Declaration complies with 37 CFR 1.497(a)(2) in that Attorney Docket No. 21375YP appears in the upper right-hand corner of the document. Enclosed for your review is a copy of the October 18 2005 Declaration.

Claims 1-3, 8-12, 17 have been amended to comply substantially with the restriction requirement of September 4, 2008. Specifically, "Het" in Claim 1 has been limited to thiazolyl and claims 4-7, and 13-16 have been canceled.

Claim 18 is rejected under 35 USC 112, first paragraph, as failing to comply with the written description requirement. To expedite a Notice of Allowance claim 18 has been herein deleted without prejudice to refile.

Claims 1-3, 8-12, 17, are rejected under 35 USC 112, second paragraph, for failing to distinctly claim the invention. The Examiner states that in claim 1 an "or" should appear before the last substituent listed under the definition of "Het"; in R¹(o) after (p), in R²(d) after the definition (d), in R³(d) after the definition (e) and in R⁶, R⁷, and R⁸ after the definition of (d). By this amended claim 1 has been amended to insert "or" where appropriate. The Examiner further states that in claim 1 there is a valence problem wherever -C=C- appears. Claim 1 has been amended to replace -C=C- with -CH=CH-. No new matter has been added. It is well known in the art that -C=C- is the

same as $-\text{CH}=\text{CH}-$. Thus, one of ordinary skill in the art would not deem $-\text{C}=\text{C}-$ to have a valence problem. C

Claims 9-12 are further rejected under 35 USC 112, second paragraph because there is no "period" at the end of the claim and an "or" is needed at before the last compound listed. Claims 9-12 have been herein amended to add periods and an "or" where appropriate. Finally, claim 10 is rejected for lacking antecedent basis when R^6 is "Cl". Claim 10 has been amended to be an independent claim thereby removing the need for an antecedent basis.

Claims 1-3, 8-12, 17 and 18 are rejected under 35 USC section 102 (b) as being anticipated by Oballa et al, Brooks et al., Pick et al., Tanaka et al., and Kimura et al. Specifically, the Examiner states that Oballa et al discloses compound 17, lines 29-30 and Pick et al disclose the compound in column 5. However, at least one of R^6 , R^7 , & R^8 has to be other than hydrogen in the claimed invention unlike the Oballa et al., and Pick et al. The Brooks et al., compound differs from the claimed invention in that generic formula I does not provide for a biphenyl substituent. The Tanaka et al., and Kimura et al., compounds differ from the claimed invention in that in the claimed invention R^4 and R^5 is limited to hydrogen only. Thus, a more careful review of these references will reveal that they do not disclose the instantly claimed invention.

Claims 1-3, 8-12, 17 and 18 are rejected under 35 USC section 103(a) as being unpatentable over Oballa et al., Pick et al., and Tanaka et al. Applicants respectfully traverse. Oballa et al., is directed to compounds having cathepsin activity for bone disorder. Additionally, the generic formula I does not provide compounds with a thiazoly-biphenyl substituent. Pick et al., is directed to compounds for cardiac function and differs from the claimed invention in that R^1 in the claimed invention cannot be $\text{C}(\text{O})\text{NH}_2$ or CNOHNH_2 . Finally, Tanaka et al is directed to compounds for Alzheimers disease which differ from the claimed invention in that R^4 and R^5 of the claimed invention cannot be OR, where R is hydrogen, alkyl, or alkenyl. There is no teaching or suggestion in any of these references of the claimed compounds for use in treating pain.

In light of the amendments and remarks herein Applicants believe the claims are in condition for allowance. The Examiner is respectfully requested to contact the undersigned at the number below if this would expedite the allowance.

Respectfully submitted,

By: 

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Date: September 22, 2008

In light of the amendments and remarks herein Applicants believe the claims are in condition for allowance. The Examiner is respectfully requested to contact the undersigned at the number below if this would expedite the allowance.

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